FIG. 1

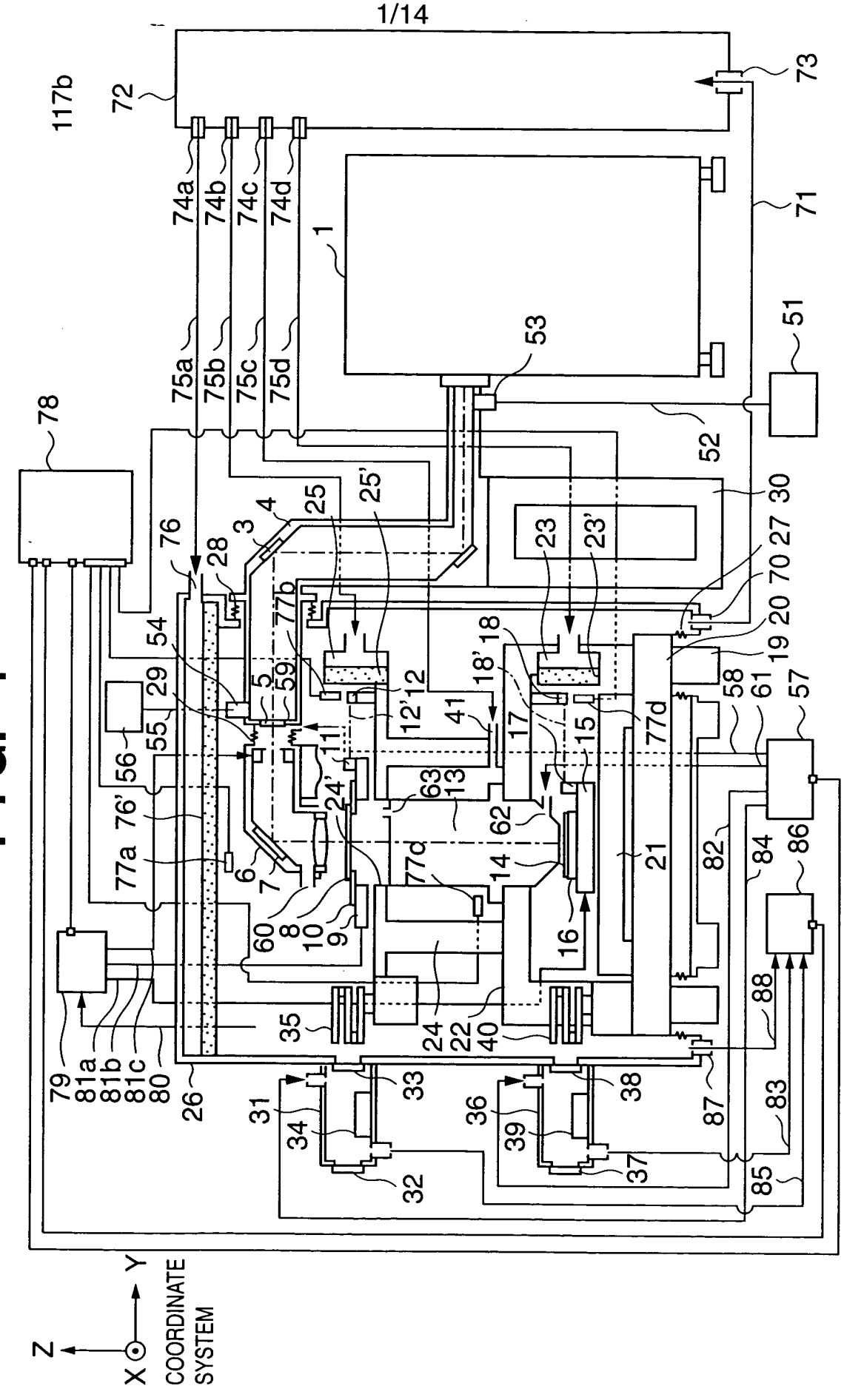

117b
72
73
74a
74b
74c
74d
71
1
75a
75b
75c
75d
53
51
78
52
30
76
28
3
4
25
25'
23
23'
27
70
20
19
18
18'
54
29
5
59
77b
12
12'
41
17
15
77d
58
61
57
55
56
11
63
13
62
21
82
84
86
76'
77a
24'
6
7
77d
14
16
60
8
10
9
22
24
40
35
88
79
81a
81b
81c
80
26
31
33
38
87
83
34
36
39
32
37
85
COORDINATE SYSTEM
Y
Z
X

FIG. 2

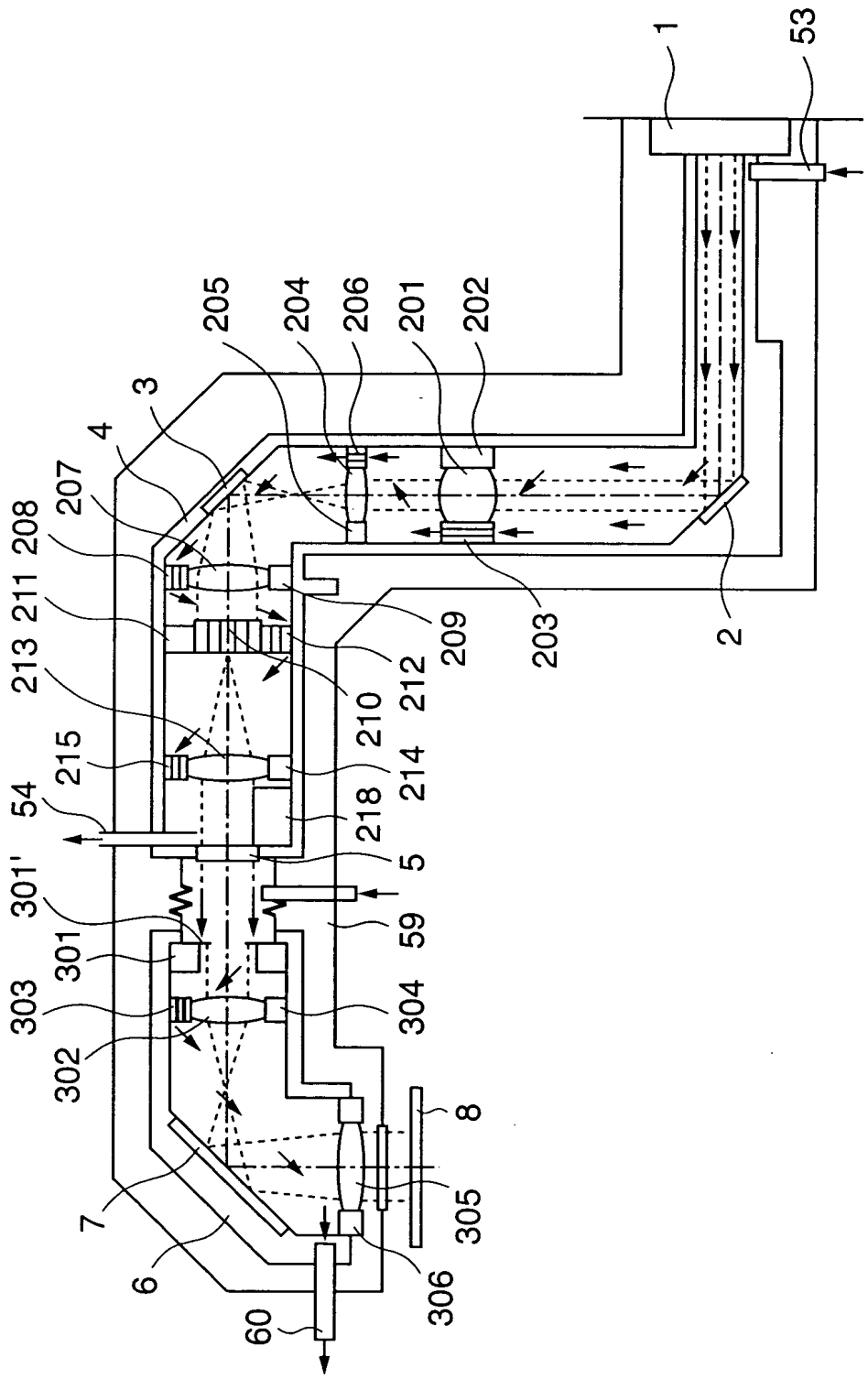

1
53
205
204
206
201
202
3
4
207
208
211
213
215
54
301'
301
303
302
7
6
60
306
305
8
304
59
5
218
214
212
210
209
203
2

FIG. 3

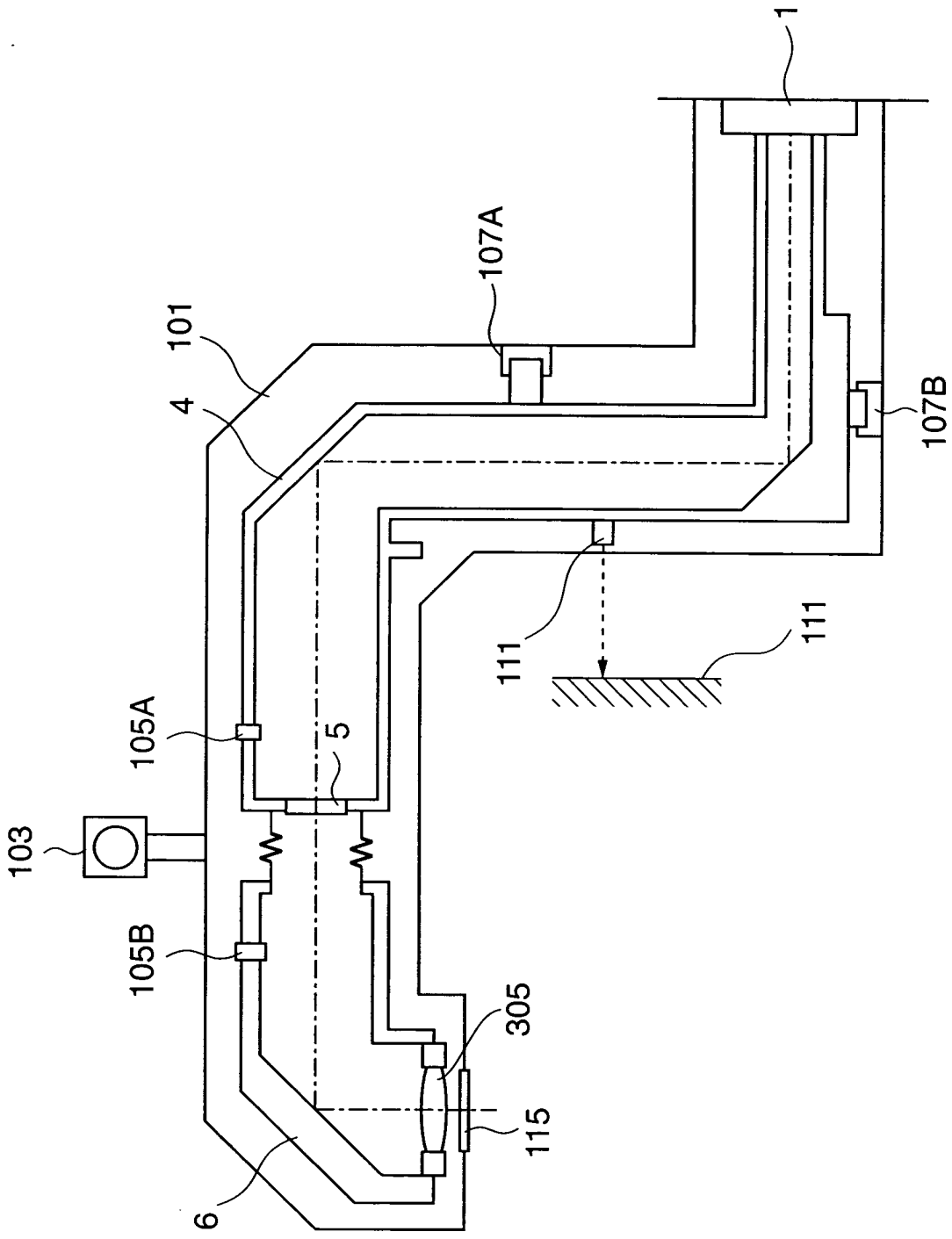


FIG. 4

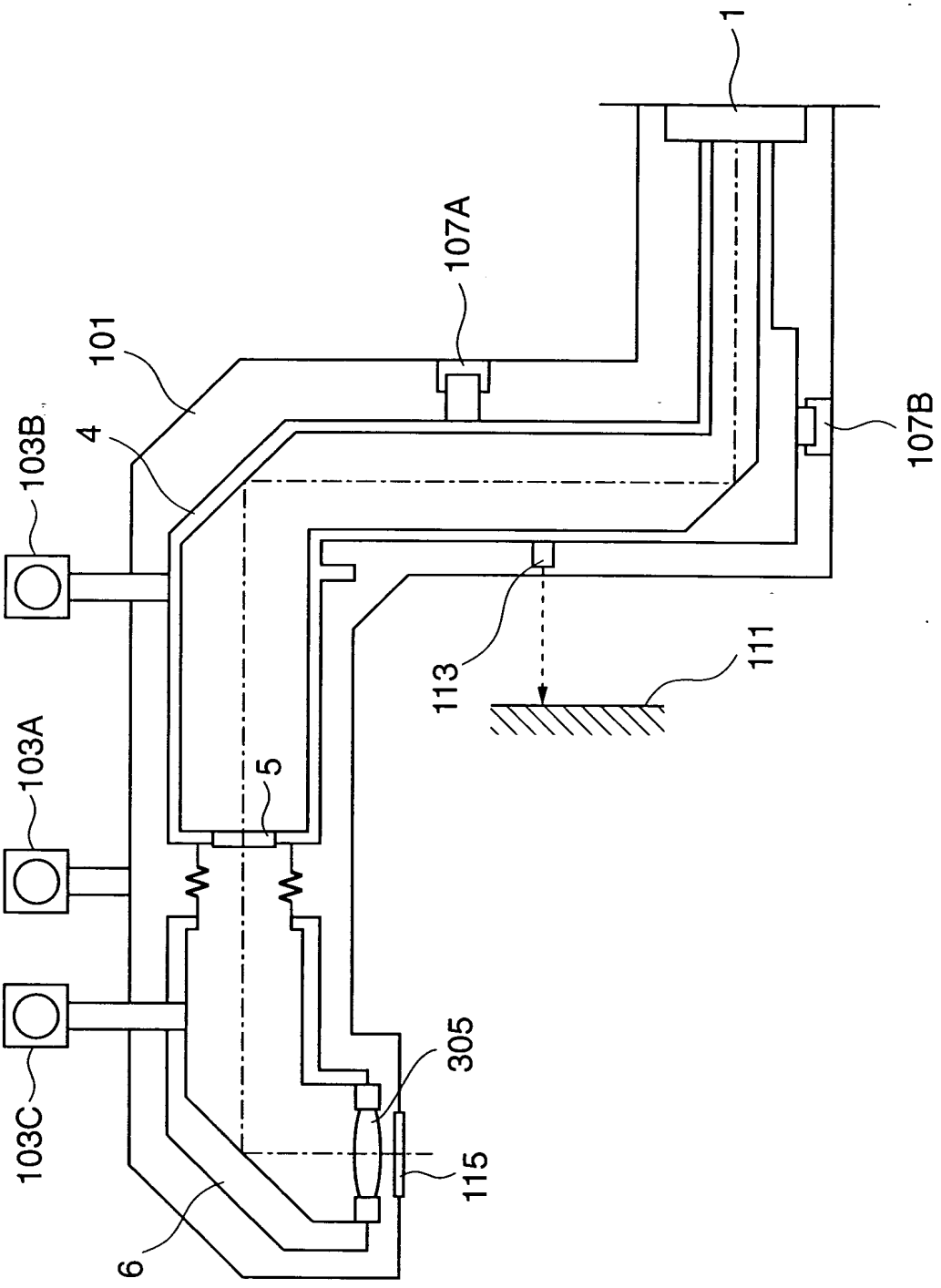
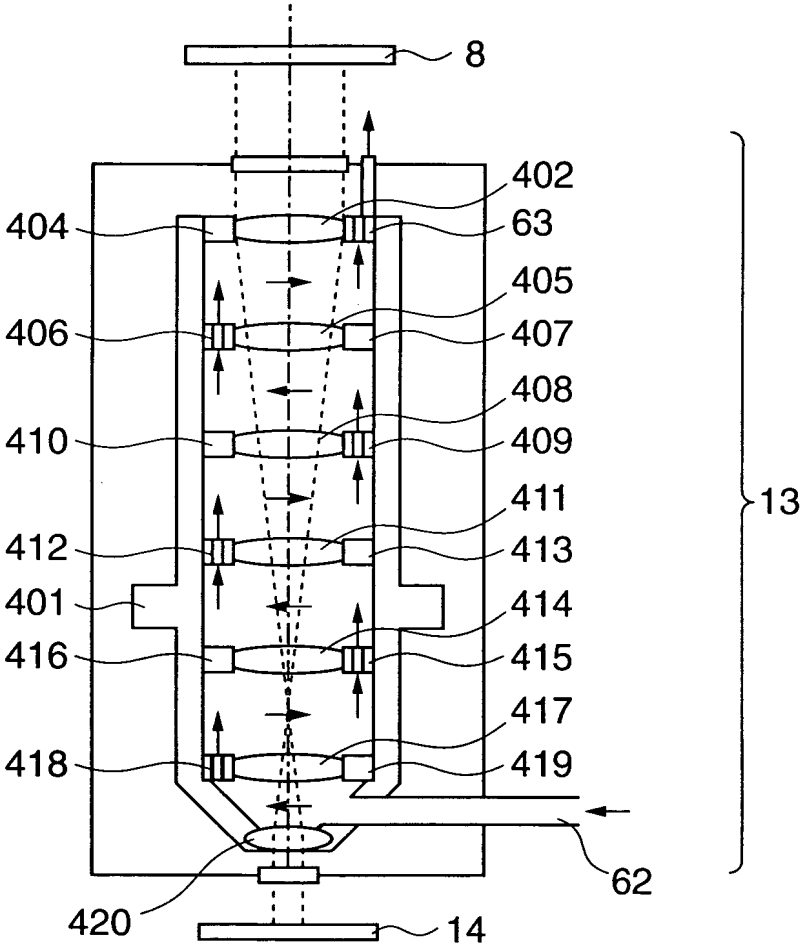


FIG. 5


8
402
404
63
405
406
407
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13
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401
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416
415
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418
419
62
420
14

FIG. 6

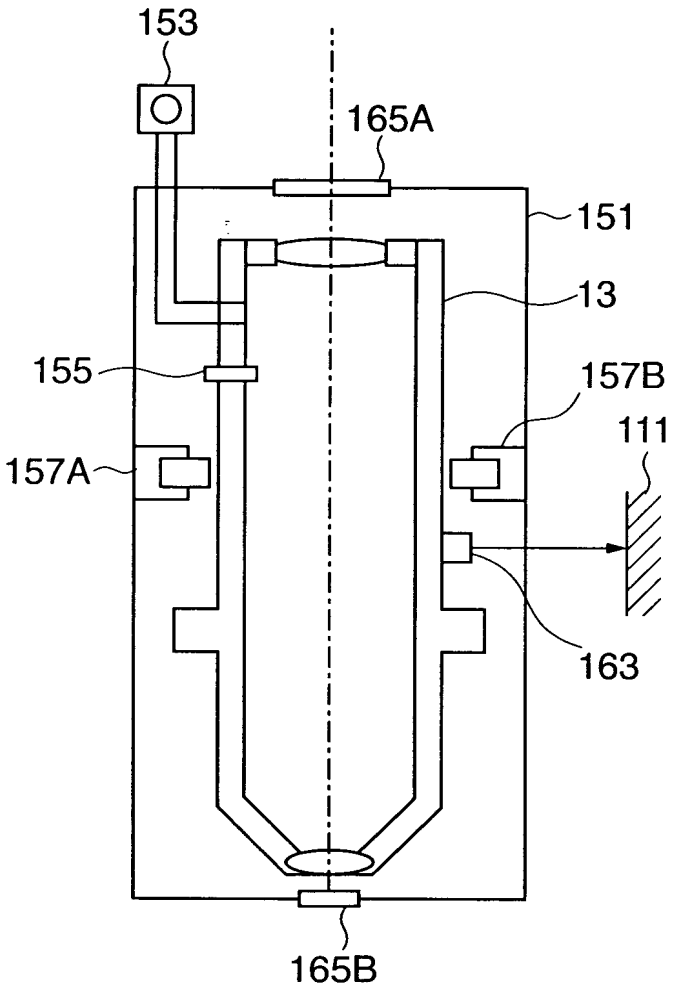


FIG. 7

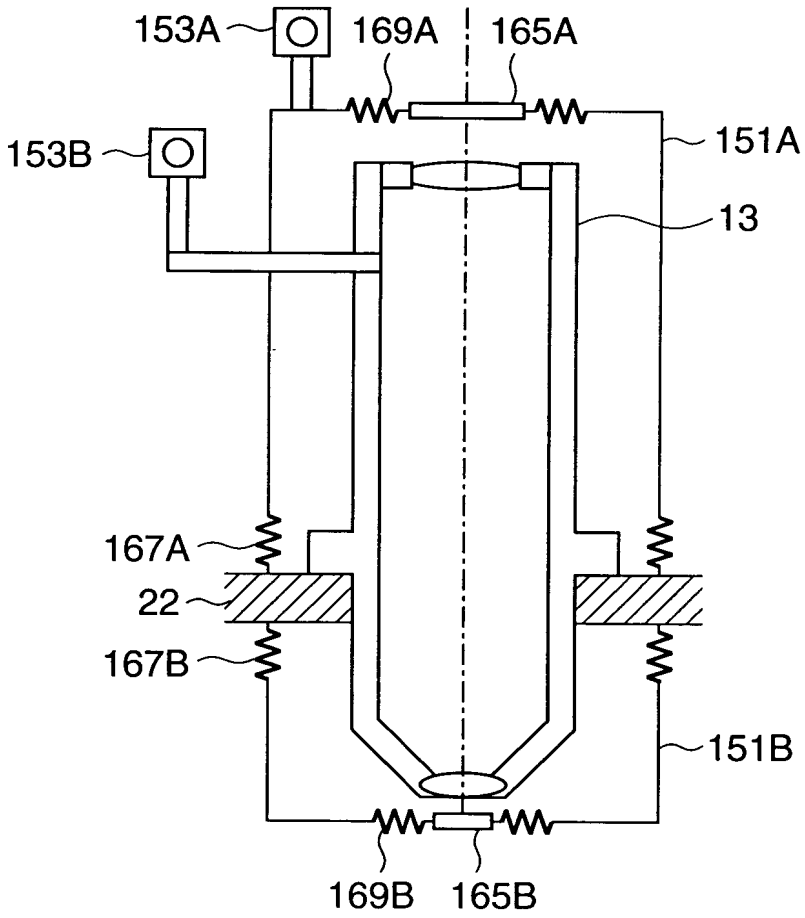


FIG. 8

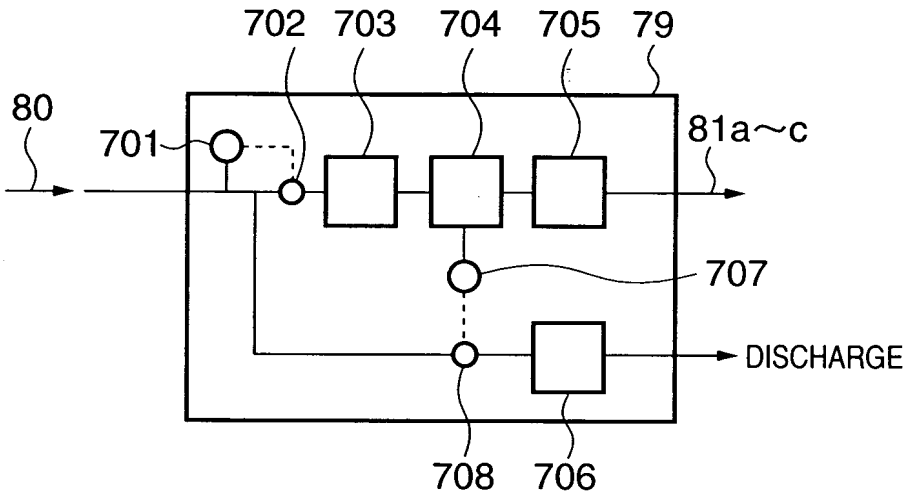


FIG. 9

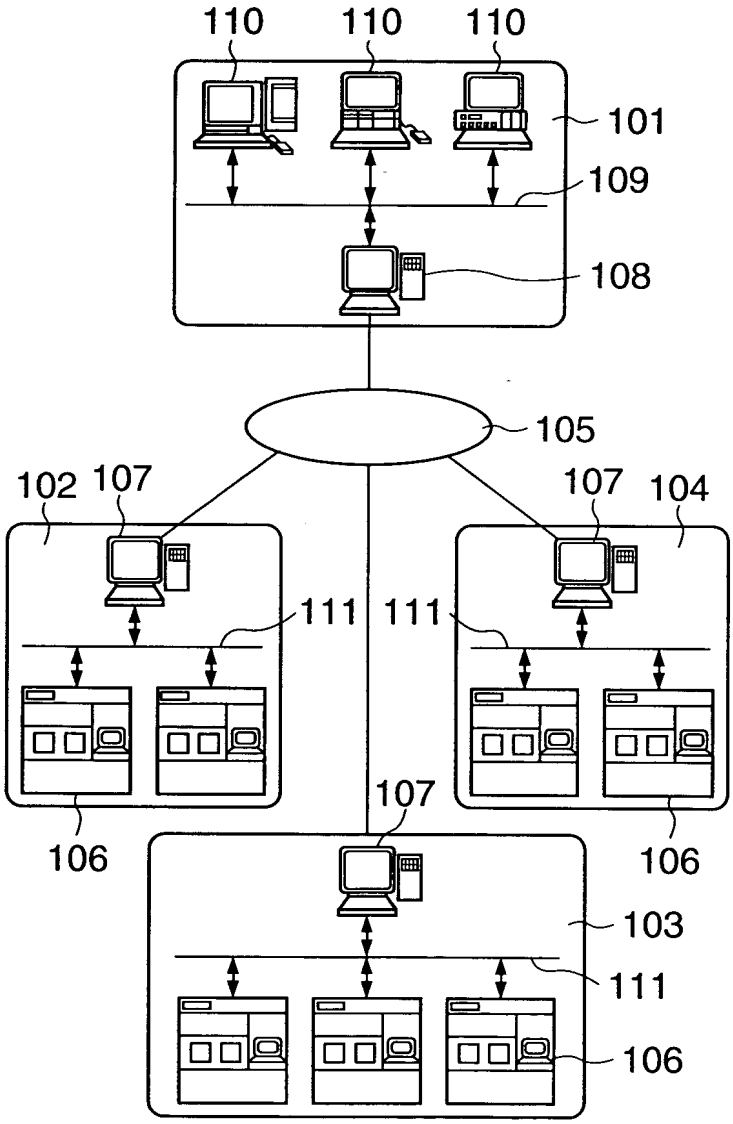

110
110
110
101
109
108
105
102
107
107
104
111
111
107
106
106
103
111
106

FIG. 10

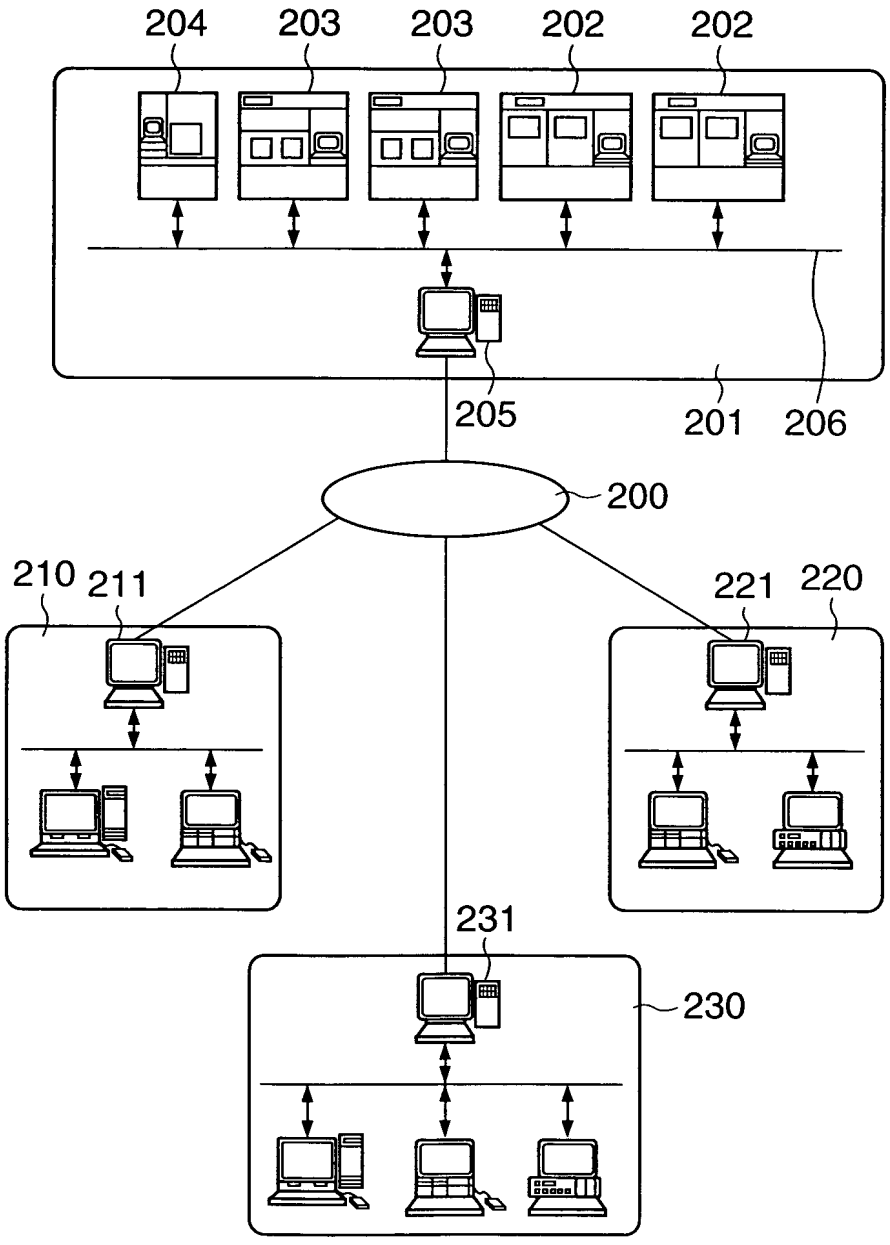


FIG. 11

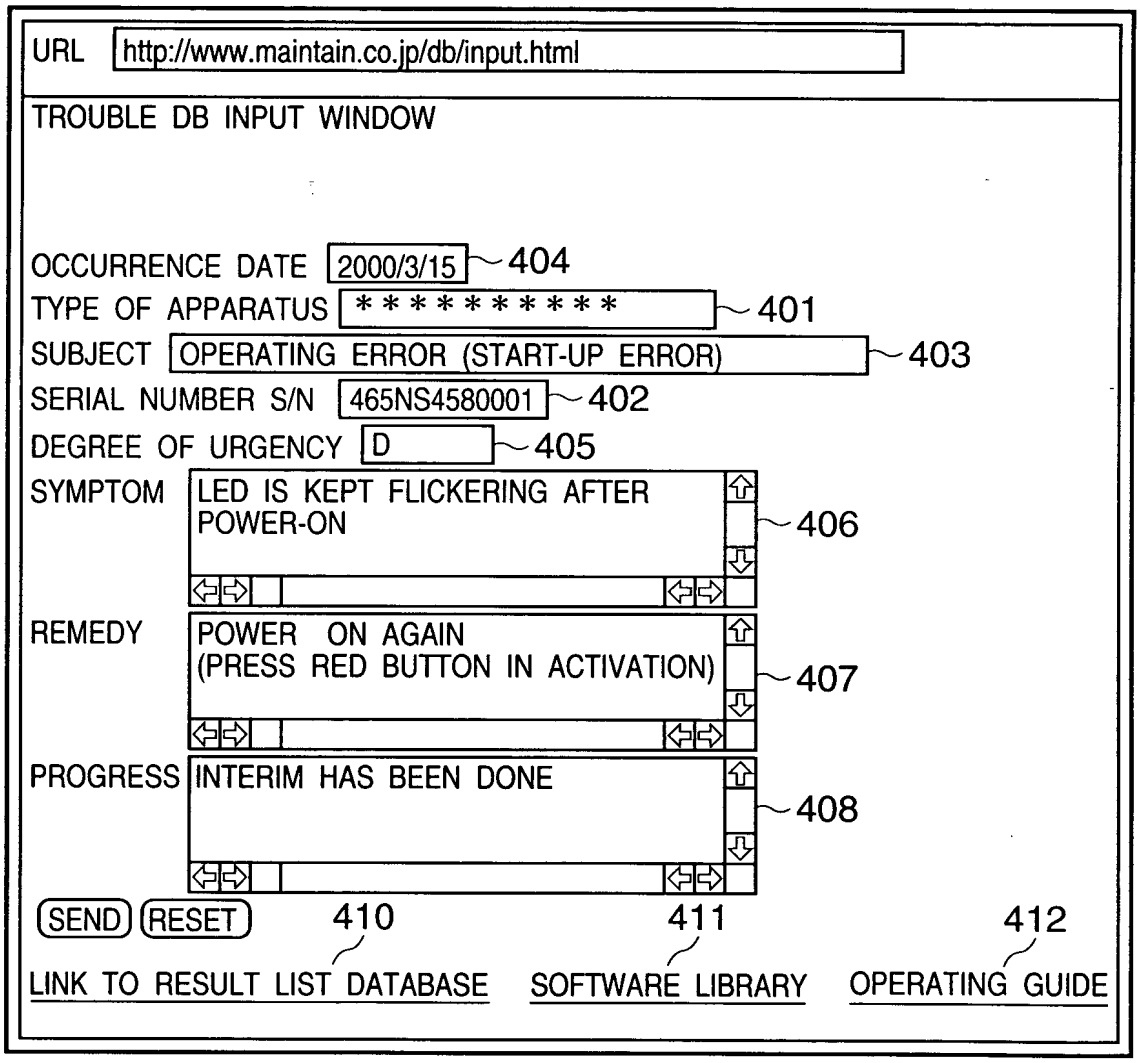

URL
http://www.maintain.co.jp/db/input.html
TROUBLE DB INPUT WINDOW
OCCURRENCE DATE
2000/3/15
404
TYPE OF APPARATUS
****
401
SUBJECT
OPERATING ERROR (START-UP ERROR)
403
SERIAL NUMBER S/N
465NS4580001
402
DEGREE OF URGENCY
D
405
SYMPTOM
LED IS KEPT FLICKERING AFTER POWER-ON
406
REMEDY
POWER ON AGAIN
(PRESS RED BUTTON IN ACTIVATION)
407
PROGRESS
INTERIM HAS BEEN DONE
408
SEND
RESET
410
411
412
LINK TO RESULT LIST DATABASE
SOFTWARE LIBRARY
OPERATING GUIDE

FIG. 12

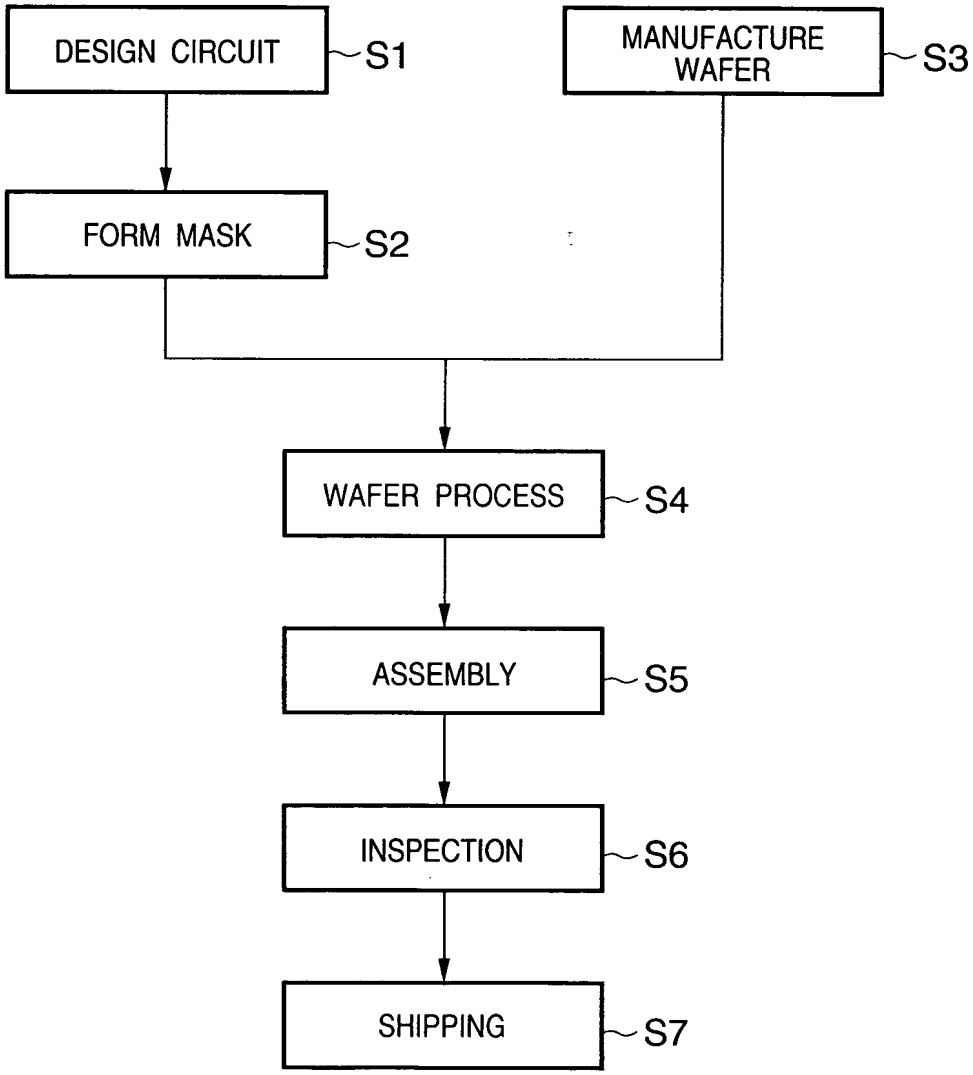

DESIGN CIRCUIT
S1
MANUFACTURE WAFER
S3
FORM MASK
S2
WAFER PROCESS
S4
ASSEMBLY
S5
INSPECTION
S6
SHIPPING
S7

FIG. 13

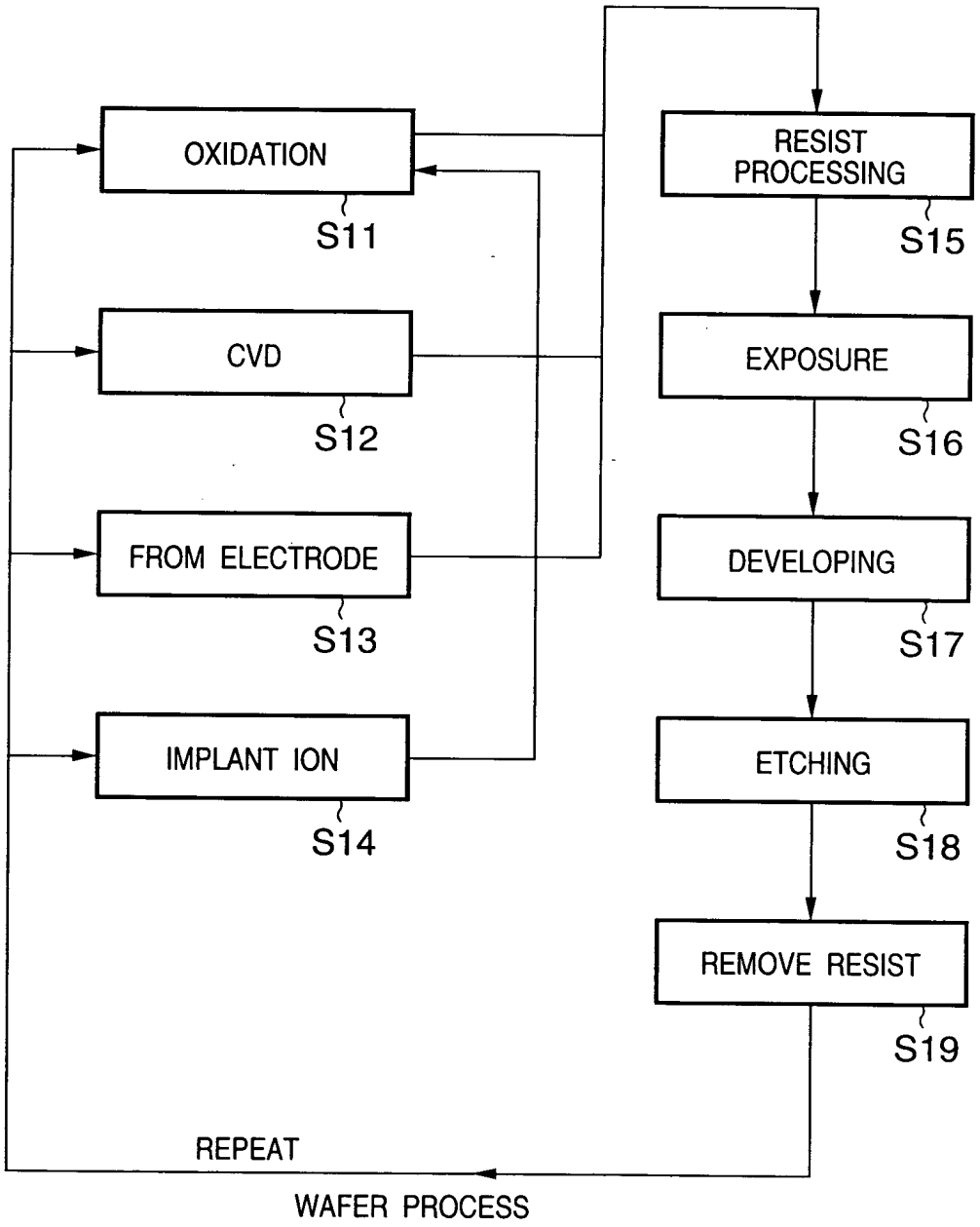
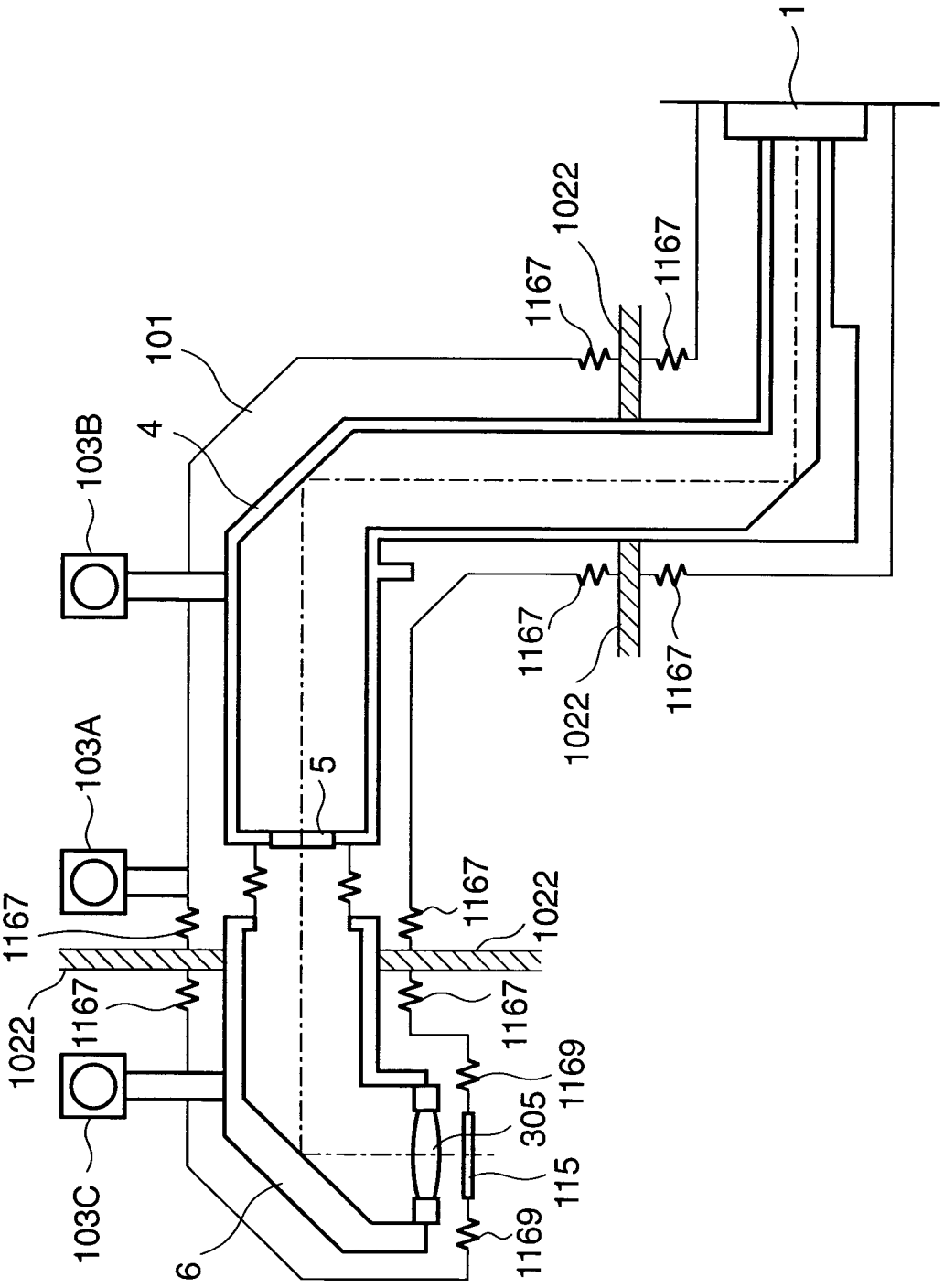

OXIDATION
S11
CVD
S12
FROM ELECTRODE
S13
IMPLANT ION
S14
RESIST PROCESSING
S15
EXPOSURE
S16
DEVELOPING
S17
ETCHING
S18
REMOVE RESIST
S19
REPEAT
WAFER PROCESS

FIG. 14


1
1022
1167
1167
101
4
103B
1167
1022
1167
1167
5
103A
1167
1022
1167
1167
1022
1167
1169
305
115
103C
6
1169